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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,697	09/23/2003	Takashi Okaji	UNIU79.015AUS	2203

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EXAMINER

LOFTIS, JOHNNA RONEE

ART UNIT	PAPER NUMBER
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3623

NOTIFICATION DATE	DELIVERY MODE
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08/05/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/668,697	Applicant(s) OKAJI ET AL.	
	Examiner JOHNNA R. LOFTIS	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a non-final office action upon examination of application number 10/668,698. Claims 1-5 are pending and have been examined on the merits discussed below.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. The arguments are based on newly amended claim limitations. These new limitations are addressed below. Examiner asserts that Aoki does teach more than one product being produced in sequence while maintaining the delivery date as maximum. Aoki teaches different products being scheduled and feed dates determined so that a first product is processed prior to a second, while maintaining delivery dates.
3. In light of recent Supreme Court precedent and recent Federal Circuit decisions, claims 1-4 warrant new rejections under 35 USC 101 since the method is not tied to the apparatus. These rejections are presented below. In addition, claim 5 is also rejected under 35 USC 101 since it is directed to software per se.
4. Applicant's amendments replacing missing letters/wording in the specification and claims are sufficient to overcome previous objections. Those previous objections are withdrawn.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-5 are rejected under 35 U.S.C. 101. Regarding claims 1-4, based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. While information is stored in a database, there is only a nominal tie between the method and apparatus. Specifically, the claim limitation directed to the analysis of the data must positively recite the apparatus to which it is tied. Thus, claims 1-4 are non-statutory since they may be performed within the human mind.

Further, claim 5 is also rejected as being directed toward non-statutory subject matter. The claim is directed to software per se. Claim 5 recites “a production scheduling management software program”. The current claim language does not specify the software is part of or statically embodied in a physical medium. Software not statically embodied on a physical medium are considered descriptive material per se. As drafted, the claim fails to define any structural and functional interrelationships between the software per se and other elements of the invention that permit the software’s function to be realized. (See MPEP § 2106 Section IV B 1 (a)).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki, US 5,325,304, in view of Seth et al, US 7,065,499.

As per claim 1, Aoki teaches receiving information of customer orders and information of and storing into a received order database (column 2, lines 43-48 – order information is stored in an order data file); dividing orders stored in said received order database based on a reference master having various kinds of information about production materials registered therein, and storing the information of the orders which have been subjected to the division process to a received order division database (data file; column 5, lines 8-31 – ordered products are analyzed

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to determine how many products can be fulfilled by stock products and how many are necessary to be produced; the orders are stored in a data file); applying a process development to the orders which have been subjected to the division process, based on a basic unit master and storing into a process development database (column 5, lines 32-41 – a feeding plan is determined from standard production periods based on previous orders); specifying an optimum production starting date based on the information of orders which have been subjected to the process development and a production pattern stored in a production pattern database, performing loading, and storing results of the loading into a production planning database (column 5, lines 32-41 – an optimal start date is determined based on standard production periods, i.e., if delivery is scheduled for 11/30 and standard production period is 20 days, the latest feeding (start) date is 11/9); creating delivery date answer information based on said optimum production starting date (column 5, lines 32-41 – an optimal start date is determined based on standard production periods, i.e., if delivery is scheduled for 11/30 and standard production period is 20 days, the latest feeding (start) date is 11/9); and wherein said production pattern describes a sequence of production of a plurality of products, and it set in such a manner that a production scheduling is repeated periodically and that the compliance rate of delivery date of a target product becomes a maximum (column 5, lines 32-67 – the delivery date is kept at a maximum, while the feeding day varies to accommodate the delivery date. For each different product, a feeding day is calculated. See column 5, lines 50-61 which specifically indicates more than one product is being produced and each product is scheduled in sequence (first process producing two apparatuses is scheduled so that it takes place prior to second process producing one apparatus).

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Aoki does not explicitly teach prospect orders. Seth et al teaches gathering product queries and requests including customer committed orders as well as forecasted orders in an analogous art of for the benefit of processing the orders to arrive at a promised delivery date. It would have been obvious to one of ordinary skill in the art at the time of the invention to include both customer orders and forecasted (prospect) orders in the methodology of Aoki as a way to achieve the expected results of fully anticipating demand requests so as to ensure products are available when promised.

As per claim 2, Aoki teaches changing a production scheduling stored in said production planning database (column 5, lines 42-67 – if a vacancy of the producing apparatuses is found, the load of the order is reallocated (changed) to begin at an earlier date).

As per claim 3, Aoki teaches displaying a production scheduling stored in said production planning database and production results in a compared manner (column 6, lines 9-47 - comparing the scheduled production delivery date with the appointed delivery date from the customer and displaying the scheduled date delivery and number of missing days so that an operator can change the delivery date).

As per claim 4, Aoki teaches production pattern is set in such a manner that a production scheduling is repeated periodically and that the compliance rate of delivery date of a target product maximum (column 5, lines 42-67 – if a vacancy of the producing apparatuses is found, the load of the order is reallocated (changed) to begin at an earlier date; this process is repeated; as the delivery date is moved up this keeps in compliance with scheduled delivery creating a pattern in which as new vacancies arrive, the start dates can be moved up).

As per claim 5, Aoki teaches receiving information of customer orders and information of and storing into a received order database (column 2, lines 43-48 – order information is stored in an order data file); dividing orders stored in said received order database based on a reference master having various kinds of information about production materials registered therein, and storing the information of the orders which have been subjected to the division process to a received order division database (data file; column 5, lines 8-31 – ordered products are analyzed to determine how many products can be fulfilled by stock products and how many are necessary to be produced; the orders are stored in a data file); applying a process development to the orders which have been subjected to the division process, based on a basic unit master and storing into a process development database (column 5, lines 32-41 – a feeding plan is determined from standard production periods based on previous orders); specifying an optimum production starting date based on the information of orders which have been subjected to the process development and a production pattern stored in a production pattern database, performing loading, and storing results of the loading into a production planning database (column 5, lines 32-41 – an optimal start date is determined based on standard production periods, i.e., if delivery is scheduled for 11/30 and standard production period is 20 days, the latest feeding (start) date is 11/9); creating delivery date answer information based on said optimum production starting date (column 5, lines 32-41 – an optimal start date is determined based on standard production periods, i.e., if delivery is scheduled for 11/30 and standard production period is 20 days, the latest feeding (start) date is 11/9); and wherein said production pattern describes a sequence of production of a plurality of products, and it set in such a manner that a production scheduling is repeated periodically and that the compliance rate of delivery date

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of a target product becomes a maximum (column 5, lines 32-67 – the delivery date is kept at a maximum, while the feeding day varies to accommodate the delivery date. For each different product, a feeding day is calculated. See column 5, lines 50-61 which specifically indicates more than one product is being produced and each product is scheduled in sequence (first process producing two apparatuses is scheduled so that it takes place prior to second process producing one apparatus).

Aoki does not explicitly teach prospect orders. Seth et al teaches gathering product queries and requests including customer committed orders as well as forecasted orders in an analogous art of production scheduling for the benefit of processing orders to arrive at a promised delivery date (column 5, lines 41-59 and abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to include both customer orders and forecasted (prospect) orders in the methodology of Aoki as a way to achieve the expected results of fully anticipating demand requests so as to ensure products are available when promised.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHNNA R. LOFTIS whose telephone number is (571)272-6736. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jl/

7/28/08

/Jonathan G. Sterrett/

Primary Examiner, Art Unit 3623